

**MOBILE VESSEL METHOD AND SYSTEM FOR IMPREGNATING
POROUS ARTICLES**

ABSTRACT OF THE DISCLOSURE

5 An impregnation process is employed in a system using a sequence of mobile
impregnation processing vessels which are transported to a series of processing stations, each
of which performs a specific step in an impregnation process. At least one porous article is
retained in each of said vessels along with a flowable impregnating composition therein. The
vessels are sequentially directed along with the porous articles and flowable composition
10 therein to at least one selected station chosen from the series of stations. Such processing
stations can include a vacuum station for applying a vacuum to the porous articles; a
pressurization station for applying a pressurization step to the porous articles; an independent
impregnant retrieval system in which residual impregnant is retrieved in a tip and pour
process; and a centrifuging station for removing excess impregnant from the exterior surface
15 of the articles after they have been submerged in the impregnating composition. If the sealant
composition requires de-aeration prior to use, the above system can implement an
independent de-aeration vessel which sustains a vacuum for removal of dissolved air within
the composition prior to initiation of a porosity impregnation process.